Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.   **(Previously Presented)** In a data-storage system, a method for providing data indicative
     of the performance of a competing algorithm and an incumbent algorithm, said method
     comprising:

     evaluating an incumbent-algorithm score indicative of a performance of an incumbent
         algorithm;

     simulating performance of a competing algorithm executing in place of said incumbent
         algorithm;

     on the basis of said simulation, evaluating a competing-algorithm score predictive of a
         corresponding performance of said competing algorithm; and

     providing said competing-algorithm score and said incumbent-algorithm score to an
         output device.

2.   **(Previously Presented)** The method of claim **1**, further comprising providing data
     indicative of a performance difference between said competing algorithm and said
     incumbent algorithm.

3.   **(Previously Presented)** The method of claim **2**, wherein providing data comprises
     monitoring said incumbent-algorithm score and said competing-algorithm score during a
     selected interval.

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4.   **(Original)** The method of claim **3**, wherein providing data further comprises displaying data indicative of a performance of said incumbent algorithm and said competing algorithm during said selected interval.

5.   **(Previously Presented)** The method of claim **4**, wherein displaying data comprises evaluating a ratio indicative of an extent to which said competing-algorithm score exceeds said incumbent algorithm score during said selected interval.

6.   **(Original)** The method of claim **1**, wherein simulating performance comprises:

    obtaining meta-data characterizing an input-data stream provided to said incumbent algorithm; and

    simulating performance of said competing algorithm were it to operate on an input-data stream characterized by said meta-data.

7.   **(Original)** The method of claim **6** wherein obtaining meta-data comprises maintaining statistics descriptive of said input data-stream during a selected interval.

8.   **(Original)** The method of claim **1**, wherein evaluating a competing-algorithm score comprises incorporating a penalty into said competing-algorithm score.

9.   **(Original)** The method of claim **8**, further comprising selecting said penalty to be indicative of a cost associated with replacing said incumbent algorithm with said competing algorithm.

10.   **(Original)** A method for providing data indicative of a performance of a competing algorithm and an incumbent algorithm in a data-storage system, said method comprising:

    statistically characterizing a usage pattern of said data-storage system; and

    on the basis of said statistical characterization, simulating a performance of said competing algorithm were it to execute on said data-storage system in place of said incumbent algorithm.

11.   **(Previously Presented)** The method of claim **10**, further comprising:

    evaluating actual performance of said incumbent algorithm in response to said usage
pattern;

    simulating said performance of said competing algorithm in response to said usage
pattern; and

    communicating, to an output device, data indicative of a comparison between said actual
performance of said incumbent algorithm and said simulated performance of said
competing algorithm.

12.   **(Original)** The method of claim **10**, wherein statistically characterizing a usage pattern of
said data-storage system comprises generating meta-data that characterizes an input data-
stream to said data-storage system.

13.   **(Previously Presented)** The method of claim **11**, further comprising incorporating a cost
of replacement into a performance selected from the group consisting of:

    (1) said actual performance of said incumbent algorithm, and

    (2) said simulated performance of said competing algorithm.

14.   **(Previously Presented)** A method for comparing performances of a plurality of
algorithms in performing a task, said method comprising:

    simulating execution of a competing algorithm operating on an input stream;

    evaluating, on the basis of said simulation, a competing-algorithm performance of said
competing algorithm;

    evaluating an incumbent-algorithm performance of an incumbent-algorithm operating
on said input stream; and

providing data indicative of a comparison between said incumbent-algorithm

performance and said competing-algorithm performance.

15.   **(Previously Presented)** A data-storage system comprising

a processor,

and computer-readable media having software encoded thereon, said software having

instructions for causing the processor to execute

a data-condenser configured to receive a data-stream, said data-condenser generating

meta-data characterizing said data stream;

a competing-algorithm simulator in communication with said data-condenser, said

competing algorithm simulator generating data indicative of a performance attribute

of a competing algorithm when said competing algorithm operates on a data-stream

characterized by said meta-data; and

a tournament manager configured to provide output data indicative of a comparison

between a performance attribute of said competing algorithm and a corresponding

performance attribute of an incumbent algorithm.

16.   **(Previously Presented)** A computer-readable medium having encoded thereon software

for providing data indicative of the performance of a competing algorithm and an

incumbent algorithm, said software comprising instructions for:

evaluating an incumbent-algorithm score indicative of a performance of an incumbent

algorithm;

simulating performance of a competing algorithm executing in place of said incumbent

algorithm;

on the basis of said simulation, evaluating a competing-algorithm score predictive of a

corresponding performance of said competing algorithm; and

providing said competing-algorithm score and said incumbent-algorithm score to an output device.

17.   **(Previously Presented)** The computer-readable medium of claim **16**, wherein said software further comprises instructions for providing data indicative of a performance difference between said competing algorithm and said incumbent algorithm.

18.   **(Previously Presented)** The computer-readable medium of claim **17**, wherein said instructions for providing data comprise instructions for monitoring said incumbent-algorithm score and said competing-algorithm during over a selected interval.

19.   **(Original)** The computer-readable medium of claim **18**, wherein said instructions for providing data further comprise instructions for displaying data indicative of a performance of said incumbent algorithm and said competing algorithm during said selected interval.

20.   **(Previously Presented)** The computer-readable medium of claim **19**, wherein said instructions for displaying data comprise instructions for evaluating a ratio indicative of an extent to which said competing-algorithm score exceeds said incumbent algorithm score during said selected interval.

21.   **(Previously Presented)** The computer-readable medium of claim **16**, wherein said instructions for simulating performance comprise instructions for:

obtaining meta-data characterizing an input-data stream provided to said incumbent algorithm; and

wherein simulating performance of a competing algorithm comprises simulating performance of said competing algorithm were it to operate on an input-data stream characterized by said meta-data.

22.   **(Original)** The computer-readable medium of claim **21** wherein said instructions for obtaining meta-data comprise instructions for maintaining statistics descriptive of said input data-stream during a selected interval.

23.   **(Original)** The computer-readable medium of claim **16**, wherein said instructions for evaluating a competing-algorithm score comprise instructions for incorporating a penalty into said competing-algorithm score.

24.   **(Original)** The computer-readable medium of claim **23**, wherein said software further comprises instructions for selecting said penalty to be indicative of a cost associated with replacing said incumbent algorithm with said competing algorithm.

25.   **(Original)** A computer-readable medium having encoded thereon software for providing data indicative of a performance of a competing algorithm and an incumbent algorithm in a data-storage system, said software comprising instructions for:

   statistically characterizing a usage pattern of said data-storage system; and

   on the basis of said statistical characterization, simulating a performance of said
       competing algorithm were it to execute on said data-storage system in place of said
       incumbent algorithm.

26.   **(Previously Presented)** The computer-readable medium of claim **25**, wherein said software further comprises instructions for:

   evaluating actual performance of said incumbent algorithm in response to said usage
       pattern;

   simulating said performance of said competing algorithm in response to said usage
       pattern; and

communicating, to an output device, data indicative of a comparison between said actual performance of said incumbent algorithm and said simulated performance of said competing algorithm.

27.   **(Original)** The computer-readable medium of claim **25**, wherein said instructions for statistically characterizing a usage pattern of said data-storage system comprise instructions for generating meta-data that characterizes an input data-stream to said data-storage system.

28.   **(Previously Presented)** The computer-readable medium of claim **26**, wherein said software further comprises instructions for incorporating a cost of replacement into a performance selected from said actual performance of said incumbent algorithm and said simulated performance of said competing algorithm.

29.   **(Currently Amended)** A computer-readable medium having encoded thereon software for comparing performances of a plurality of algorithms in performing a task, said software comprising instructions for:

simulating execution of a competing algorithm operating on [said] an input stream;

evaluating, on the basis of said simulation, a competing-algorithm performance of said competing algorithm;

evaluating an incumbent-algorithm performance of an incumbent-algorithm operating on said input stream;

providing data indicative of a comparison between said incumbent algorithm and said competing algorithm.